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REMARKS

Claims 1-9, 12-15 and 16-22 are currently pending in this application. Reconsideration is respectfully requested in light of the above claim amendments and the following remarks.

The Examiner objected to the specification for failing to provide proper antecedent basis for subject matter recited in claims 10 and 11. Applicants have cancelled claims 10 and 11 without prejudice and respectfully requests that this objection be withdrawn.

The Examiner objected to claims 10, 14 and 15 for various informalities. Applicants have cancelled claim 10 without prejudice and amended claims 14 and 15 to clarifying the relationship between the guide member and guide system. Applicants respectfully request that these objections be withdrawn.

The Examiner rejected claim 6 and 10-11 under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Applicants have amended claim 6 to provide proper antecedent basis for the objected to claim elements and cancelled claims 10 and 11 without prejudice. Applicants respectfully request reconsideration and withdrawal of this rejection.

The Examiner rejected claims 1-4, 7 and 12-15 under 35 U.S.C §102(b) as being anticipated by U.S. Patent 5,020,545 to Soukup. Applicants respectfully traverse this rejection.

Applicants' claimed invention, as recited in pending independent claims 1 and 2 is directed to an implantable endocardial lead having a guide system located proximally of the active fixation electrode, the guide system having a spiral track member adapted to engage an active fixation electrode for rotating the electrically active helix about the longitudinal axis as the helix is moved between the retracted and extended positions. (Underlining added for emphasis only). Applicants respectfully submit that Soukup does not disclose or suggest the recited claim elements.

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Rather the implantable lead of Soukup includes a lock pin 84 and grooves 78 and 79 that cooperate to restrain or prevent axial rotation of an inner electrode 50 relative to an outer electrode 52 when the inner electrode is in a retracted position. (Soukup, FIGS. 2A and 3, col. 6, lines 41-44). Thus, during implantation the inner conductor of the Soukup lead expands or uncoils slightly in response to rotation of connector member creating stored torsional potential energy in the inner conductor. Further, as shown with reference to FIG. 4, when the inner electrode is longitudinally advanced relative to the outer electrode the ends of the lock pin exit the grooves of the outer electrode and the inner electrode automatically rotates in response to the torsional energy stored in the coiled inner conductor 38. (Soukup, col. 7, lines 60-68).

Thus in the lead of Soukup the grooves in the outer electrode restrict rotational movement of the inner electrode and a torsional force stored in the conductor axially rotates the inner electrode. Soukup does not however disclose or suggest a guide system having a spiral track member adapted to engage an active fixation electrode for rotating the electrically active helix about the longitudinal axis as the helix is moved between the retracted and extended positions as recited in claims 1 and 2 of the present invention.

Applicants therefore respectfully submit that claims 1 and 2 are novel and unobvious over Soukup and are allowable. Applicants further submit that claims 3-9 and 12-15 that depend from claim 2 are allowable as is claim 2 and for additional limitations recited therein.

The Examiner rejected claims 1-2, 4-5, 7 and 12-13 under 35 U.S.C §102(b) as being anticipated by U.S. Patent 5,300,108 to Rebell et al. Applicants respectfully traverse this rejection.

The lead of Rebell et al. includes a compound screw 10 that is axially rotated by a stylet to translate a fixation coil (i.e. electrode) between retracted and extended positions. In the system of Rebell et al. this movement is caused by the interaction of the thread of coupling screw 14 with first and second ball bearings 17 and 18. In operation, the ball bearings 17 and 18 engage and bear against the walls of apertures 27 and 28 and the thread of coupling screw 14 to cam the compound screw 10 between

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its extended and retracted positions when the screw 10 is rotated. (Rebell et al., FIGS. 2 and 3, col. 8, lines 19-29).

Rebell et al. do not however disclose or suggest a guide system having a spiral track member adapted to engage an active fixation electrode for rotating an electrically active helix about the longitudinal axis as the helix is moved between the retracted and extended positions as recited in claims 1 and 2 of the present invention.

Applicants therefore respectfully submit that claims 1 and 2 are novel and unobvious over Rebell et al. and are allowable. Applicants further submit that claims 3-9 and 12-15 that depend from claim 2 are allowable as is claim 2 and for additional limitations recited therein.

The Examiner rejected claims 1-2, 4-5, and 7-13 under 35 U.S.C §102(e) as being anticipated by U.S. Patent 6,687,550 to Doan. Applicants respectfully traverse this rejection.

Doan discloses an implantable stimulation lead in which an electrically active helix electrode is continuously in contact with a conductive distal housing in which the helix electrode resides to mitigate electrical chatter between the two conductive parts. Doan does not however, disclose or suggest a specific structure for rotating the electrically active helix as it is translated from a retracted to an extended position. Rather, Doan simply states that "techniques for implanting a pacing lead and advancing the fixation elements are known in the art, and, therefore, will not be discussed here." (Doan, col. 3, lines 61-65).

Doan does not therefore disclose or suggest a guide system having a spiral track member adapted to engage an active fixation electrode for rotating an electrically active helix about the longitudinal axis as the helix is moved between the retracted and extended positions as recited in claims 1 and 2 of the present invention. Applicants therefore respectfully submit that claims 1 and 2 are novel and unobvious over Doan and are allowable. Applicants further submit that claims 3-9 and 12-15 that depend from claim 2 are allowable as is claim 2 and for additional limitations recited therein.

Further, newly added independent claim 16 recites similar limitations. Specifically, claim 16 recites a guide system comprising a spiral track member adapted

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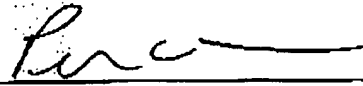
to engage a helix, for rotating the helix about the longitudinal axis as the helix is moved between the retracted and extended positions. Accordingly, applicants respectfully submit that independent claim 16 is also patentable over the cited references. Applicants further submit that claims 17-22 that depend from claim 16 are allowable as is claim 16 and for additional limitations recited therein.

In light of the above claim amendments and remarks, it is respectfully submitted that the application is in condition for allowance, and an early notice of allowance is requested.

Respectfully submitted,

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Date



Peter A. Nichols
Registration No. 47,822
Attorney for Applicant

Pacesetter, Inc.
15900 Valley View Court
Sylmar, CA 91392
818/493-2323
818/362-4795 (fax)